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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/807,467

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EXAMINER

MORRISON, THOMAS A

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/807,467	KAWAMURA ET AL.	
	Examiner	Art Unit	
	Thomas A. Morrison	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 9-11 is/are rejected.
- 7) ☒ Claim(s) 2 and 7-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the suction device" in line 6. There is insufficient antecedent basis for this limitation in the claim. The use of the terms "the suction device" also occurs in lines 8-9 and lines 9-10 of claim 1. This can be corrected, e.g., by changing "a sucking device" in line 5 to -- a suction device --.

Claim 3 recites the limitation "the suction cups" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the first negative pressure" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the second negative pressure" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-6 and 9-11, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,662,622 (Wimmer et al.).

Regarding claim 1, Figs. 1-3 disclose a sheet sucking/removing method for sucking an uppermost sheet (Fig. 1) among a plurality of stacked sheets(15), and separating the uppermost sheet from another sheet therebeneath (Fig. 1), and removing the uppermost sheet, and conveying and supplying the uppermost sheet to a subsequent process, the method comprising:

carrying out the sucking/removing by a sucking device (11) in a first negative pressure state (V_1) in which a suction negative pressure of the suction device is a minimum pressure needed in order to suck and remove only the uppermost sheet (see e.g., column 4, lines 50-57 for explanation of the vacuum level V_1 needed for feeding the sheet onto element 11); and

after the sucking/removing, carrying out the conveying/supplying by the suction device (11) in a second negative pressure state in which the suction negative pressure of the suction device (11) is a pressure needed for the conveying/supplying (see, e.g.,

Abstract at lines 11-14 for an explanation of how the pressure goes up again to retain the media during copying or recording).

Regarding claim 3, Figs. 1 and 3 and column 3, lines 27-29 disclose detecting the first negative pressure state and the second negative pressure state by a sensor (27); and

in accordance with results of the detecting, controlling (column 3, lines 45-61) a vacuum pump (including 19 and 21) connected to the suction cups (50).

Regarding claim 4, column 4, lines 45-57 disclose starting the sucking/removing immediately at a point in time when the suction negative pressure of the suction device (11) reaches the first negative pressure (V_1); and

after the sucking/removing, starting the conveying/supplying of the sheet at a point in time when the suction negative pressure of the suction device (11) reaches the second negative pressure (see, e.g., Abstract at lines 10-14 for the conveying/supplying during copying and recording).

Regarding claim 5, Figs. 1-3 show a sheet sucking/removing device (Fig. 1) for sucking an uppermost sheet (Fig. 1) among a plurality of stacked sheets (15), separating the uppermost sheet from another sheet therebeneath, removing the uppermost sheet, and conveying and supplying the uppermost sheet to a subsequent process, the device comprising:

a suction device (11) provided along a transverse direction of the sheet, and sucking/removing the sheet by negative pressure, and conveying/supplying the sheet;

a negative pressure generating source (including 19 and 21) connected to the suction device (11), and generating a first negative pressure (e.g., V_1) which is a minimum pressure needed in order for the suction device (11) to suck and remove only the uppermost sheet (see e.g., column 4, lines 50-57 for explanation of the vacuum level V_1 needed for feeding the sheet onto element 11), and generating thereafter a second negative pressure (Abstract at line 10-14) needed for the conveying/supplying; and

a negative pressure controlling device (including 20) which is capable of controlling the suction negative pressure of the suction device (11) to a state of the first negative pressure (e.g., V_1) and a state of the second negative pressure (Abstract at line 10-14),

wherein the suction negative pressure of the suction device (11) is controlled to the first negative pressure (e.g., V_1) by the negative pressure controlling device (including 20) and the sucking/removing is carried out by the suction device (11), and after the sucking/removing, the suction negative pressure of the suction device (11) is controlled to the second negative pressure (Abstract at line 10-14) by the negative pressure controlling device (including 20) and the conveying/supplying is carried out by the suction device (11).

Regarding claim 6, Fig. 1 shows that the negative pressure generating source includes a vacuum pump (including 19 and 21) connected to the suction device (11) via a conduit (Fig. 1).

Regarding claim 9, since the Wimmer et al. apparatus is applicable to drum type printers (see Abstract), such apparatus is applicable to an automatic printing plate exposure device.

Regarding claims 10-11, the portions of the drum labeled "50" can be considered to be suction cups.

Allowable Subject Matter

3. Claims 2 and 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The claims also need to be amended to overcome the rejections under 35 U.S.C. 112, second paragraph, outlined above.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3653

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "Kathy Matecki". The signature is fluid and cursive, with a small mark at the end of the last name.

**KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600**